AUTHORIZED FEDERAL SUPPLY SERVICE INFORMATION TECHNOLOGY SCHEDULE PRICELIST GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY EQUIPMENT, SOFTWARE AND SERVICES

Contract Number: GS-35F-0055M

SIN 132-51 - INFORMATION TECHNOLOGY (IT) PROFESSIONAL SERVICES

FPDS Code D301	**IT Facility Operation and Maintenance**
FPDS Code D302	**IT Systems Development Services**
FPDS Code D306	**IT Systems Analysis Services**
FPDS Code D307	**Automated Information Systems Design and Integration Services**
FPDS Code D308	**Programming Services**
FPDS Code D310	**IT Backup and Security Services**
FPDS Code D311	**IT Data Conversion Services**
FPDS Code D316	**IT Network Management Services**
FPDS Code D317	**Automated News Services, Data Services, or Other Information Services**
FPDS Code D399	**Other Information Technology Services, Not Elsewhere Classified**

Note 1: All non-professional labor categories must be incidental to and used solely to support hardware, software and/or professional services, and cannot be purchased separately.

Note 2: Offerors and Agencies are advised that the Group 70 – Information Technology Schedule is <u>not</u> to be used as a means to procure services which properly fall under the Brooks Act. These services include, but are not limited to, architectural, engineering, mapping, cartographic production, remote sensing, geographic information systems, and related services. FAR 36.6 distinguishes between mapping services of an A/E nature and mapping services which are not connected nor incidental to the traditionally accepted A/E Services.

Note 3: This solicitation is not intended to solicit for the reselling of IT Professional Services, except for the provision of implementation, maintenance, integration, or training services in direct support of a product. Under such circumstances the services must be performance by the publisher or manufacturer or one of their authorized agents.

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PERIOD COVERED BY CONTRACT:
1 NOVEMBER 2011 THROUGH 31 OCTOBER 2016
BUSINESS SIZE: SMALL

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Collective Intelligence, Inc	Phone: 717-545-9234
4 Lemoyne Drive, Suite 100	Fax: 717-545-9232
Harrisburg, PA 17043	http://www.CollectiveIntelligence.com

Products and ordering information in this Authorized FSS Information Technology Schedule Pricelist are also available on the GSA Advantage! System. Agencies can browse GSA Advantage! by accessing the Federal Supply Service's Home Page via the Internet at http://www.fss.gsa.gov/

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INFORMATION FOR ORDERING ACTIVITIES
APPLICABLE TO ALL SPECIAL ITEM NUMBERS

SPECIAL NOTICE TO AGENCIES: Small Business Participation

SBA strongly supports the participation of small business concerns in the Federal Supply Schedules Program. To enhance Small Business Participation SBA policy allows agencies to include in their procurement base and goals, the dollar value of orders expected to be placed against the Federal Supply Schedules, and to report accomplishments against these goals.

For orders exceeding the micropurchase threshold, FAR 8.404 requires agencies to consider the catalogs/pricelists of at least three schedule contractors or consider reasonably available information by using the GSA Advantage!™ on-line shopping service (www.fss.gsa.gov). The catalogs/pricelists, GSA Advantage!™ and the Federal Supply Service Home Page (www.fss.gsa.gov) contain information on a broad array of products and services offered by small business concerns.

This information should be used as a tool to assist ordering activities in meeting or exceeding established small business goals. It should also be used as a tool to assist in including small, small disadvantaged, and women-owned small businesses among those considered when selecting pricelists for a best value determination.

For orders exceeding the micropurchase threshold, customers are to give preference to small business concerns when two or more items at the same delivered price will satisfy their requirement.

1.   Geographic Scope of Contract:

Domestic delivery is delivery within the 48 contiguous states, Alaska, Hawaii, Puerto Rico, Washington, DC, and U.S. Territories. Domestic delivery also includes a port or consolidation point, within the aforementioned areas, for orders received from overseas activities.

Overseas delivery is delivery to points outside of the 48 contiguous states, Washington, DC, Alaska, Hawaii, Puerto Rico, and U.S. Territories.

Offerors are requested to check one of the following boxes:

        [ ]   The Geographic Scope of Contract will be domestic and overseas delivery.

        [ ]   The Geographic Scope of Contract will be overseas delivery only.

        [x]   The Geographic Scope of Contract will be domestic delivery only.

2.   Contractor's Ordering Address and Payment Information:

        Collective Intelligence, Inc
        Attn: Order Processing
        3540 North Progress Ave, Suite 200
        Harrisburg, PA 17110

Contractors are required to accept credit cards for payments equal to or less than the micro-purchase threshold for oral or written delivery orders. Credit cards will be acceptable for payment above the micro-purchase threshold. In addition, bank account information for wire transfer payments will be shown on the invoice.

The following telephone number(s) can be used by ordering activities to obtain technical and/or ordering assistance:

        (717) 545-9234

3.   LIABILITY FOR INJURY OR DAMAGE

The Contractor shall not be liable for any injury to ordering activity personnel or damage to ordering activity property arising from the use of equipment maintained by the Contractor, unless such injury or damage is due to the fault or negligence of the Contractor.

4.   Statistical Data for Government Ordering Office Completion of Standard Form 279:

Block 9: G. Order/Modification Under Federal Schedule
Block 16: Data Universal Numbering System (DUNS) Number: **82-959-8890**
Block 30: Type of Contractor - **– B. Other Small Business**

A.   Small Disadvantaged Business
B.   Other Small Business
C.   Large Business
G.   Other Nonprofit Organization
L.   Foreign Contractor

Block 31: Woman-Owned Small Business - **No**
Block 36: Contractor's Taxpayer Identification Number (TIN): **25-1826387**

4a.   CAGE Code: **1TE21**

4b.   Contractor **has** registered with the Central Contractor Registration Database.

5.   FOB Destination

6.   DELIVERY SCHEDULE

a.   TIME OF DELIVERY: The Contractor shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below:

SPECIAL ITEM NUMBER   DELIVERY TIME (Days ARO)

____132-51_____   As agreed upon between the contractor and the ordering activity.

b.   URGENT REQUIREMENTS: When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering activity, ordering activities are encouraged, if time permits, to contact the Contractor for the purpose of obtaining accelerated delivery. The Contractor shall reply to the inquiry within 3 workdays after receipt. (Telephonic replies shall be confirmed by the Contractor in writing.) If the Contractor offers an accelerated delivery time acceptable to the ordering activity, any order(s) placed pursuant to the agreed upon accelerated delivery time frame shall be delivered within this shorter delivery time and in accordance with all other terms and conditions of the contract.

7.   Discounts

Prices shown are NET Prices; Basic Discounts have been deducted.

a.   Dollar Volume: 6.25% for orders between $150,000 - $399,999, 16.25% on orders $400,000 and above

8.   Trade Agreements Act of 1979, as amended:

All items are U.S. made end products, designated country end products, Caribbean Basin country end products, Canadian end products, or Mexican end products as defined in the Trade Agreements Act of 1979, as amended.

9.   Statement Concerning Availability of Export Packing: None

10.   Small Requirements: The minimum dollar value of orders to be issued is $_100_.

11.   Maximum Order (All dollar amounts are exclusive of any discount for prompt payment.)

a.   The Maximum Order value for the following Special Item Numbers (SINs) is $500,000:

        Special Item Number 132-51 - Information Technology (IT) Professional Services

12.   ORDERING PROCEEDURES FOR FEDERAL SUPPLY SCHEDULE CONTRACTS

Ordering activities shall use the ordering procedures of Federal Acquisition Regulation (FAR) 8.405 when placing an order or establishing a BPA for supplies or services. These procedures apply to all schedules.

a.   FAR 8.405-1 Ordering procedures for supplies, and services not requiring a statement of work.

b.   FAR 8.405-2 Ordering procedures for services requiring a statement of work.

13.   FEDERAL INFORMATION TECHNOLOGY/TELECOMMUNICATION STANDARDS REQUIREMENTS

Ordering activities acquiring products from this Schedule must comply with the provisions of the Federal Standards Program, as appropriate (reference: NIST Federal Standards Index). Inquiries to determine whether or not specific products listed herein comply with Federal Information Processing Standards (FIPS) or Federal Telecommunication Standards (FED-STDS), which are cited by ordering activities, shall be responded to promptly by the Contractor.

13.1   FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATIONS (FIPS PUBS): Information Technology products under this Schedule that do not conform to Federal Information Processing Standards (FIPS) should not be acquired unless a waiver has been granted in accordance with the applicable "FIPS Publication." Federal Information Processing Standards Publications (FIPS PUBS) are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Information concerning their availability and applicability should be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. FIPS PUBS include voluntary standards when these are adopted for Federal use. Individual orders for FIPS PUBS should be referred to the NTIS Sales Office, and orders for subscription service should be referred to the NTIS Subscription Officer, both at the above address, or telephone number (703) 487-4650.

13.2   FEDERAL TELECOMMUNICATION STANDARDS (FED-STDS): Telecommunication products under this Schedule that do not conform to Federal Telecommunication Standards (FED-STDS) should not be acquired unless a waiver has been granted in accordance with the applicable "FED-STD." Federal Telecommunication Standards are issued by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST), pursuant to National Security Act. Ordering information and information concerning the availability of FED-STDS should be obtained from the GSA, Federal Supply Service, Specification Section, 470 East L'Enfant Plaza, Suite 8100, SW, Washington, DC 20407, telephone number (202)619-8925. Please include a self-addressed mailing label when requesting information by mail. Information concerning their applicability can be obtained by writing or calling the U.S. Department of Commerce, National Institute of Standards and Technology, Gaithersburg, MD 20899, telephone number (301)975-2833.

14.   CONTRACTOR TASKS / SPECIAL REQUIREMENTS (C-FSS-370) (NOV 2001)

(a)   Security Clearances: The Contractor may be required to obtain/possess varying levels of security clearances in the performance of orders issued under this contract. All costs associated with obtaining/possessing such security clearances should be factored into the price offered under the Multiple Award Schedule.

(b)   Travel: The Contractor may be required to travel in performance of orders issued under this contract. Allowable travel and per diem charges are governed by Pub .L. 99-234 and FAR Part 31, and are reimbursable by the ordering agency or can be priced as a fixed price item on orders placed under the Multiple Award Schedule. The Industrial Funding Fee does NOT apply to travel and per diem charges.

NOTE: Refer to FAR Part 31.205-46 Travel Costs, for allowable costs that pertain to official company business travel in regards to this contract.

(c) Certifications, Licenses and Accreditations: As a commercial practice, the Contractor may be required to obtain/possess any variety of certifications, licenses and accreditations for specific FSC/service code classifications offered. All costs associated with obtaining/ possessing such certifications, licenses and accreditations should be factored into the price offered under the Multiple Award Schedule program.

(d) Insurance: As a commercial practice, the Contractor may be required to obtain/possess insurance coverage for specific FSC/service code classifications offered. All costs associated with obtaining/possessing such insurance should be factored into the price offered under the Multiple Award Schedule program.

(e) Personnel: The Contractor may be required to provide key personnel, resumes or skill category descriptions in the performance of orders issued under this contract. Ordering activities may require agency approval of additions or replacements to key personnel.

(f) Organizational Conflicts of Interest: Where there may be an organizational conflict of interest as determined by the ordering agency, the Contractor's participation in such order may be restricted in accordance with FAR Part 9.5.

(g) Documentation/Standards: The Contractor may be requested to provide products or services in accordance with rules, regulations, OMB orders, standards and documentation as specified by the agency's order.

(h) Data/Deliverable Requirements: Any required data/deliverables at the ordering level will be as specified or negotiated in the agency's order.

(i) Government-Furnished Property: As specified by the agency's order, the Government may provide property, equipment, materials or resources as necessary.

(j) Availability of Funds: Many Government agencies' operating funds are appropriated for a specific fiscal year. Funds may not be presently available for any orders placed under the contract or any option year. The Government's obligation on orders placed under this contract is contingent upon the availability of appropriated funds from which payment for ordering purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are available to the ordering Contracting Officer.

15.   CONTRACT ADMINISTRATION FOR ORDERING ACTIVITIES

Any ordering activity, with respect to any one or more delivery orders placed by it under this contract, may exercise the same rights of termination as might the GSA Contracting Officer under provisions of FAR 52.212-4, paragraphs (l) Termination for the ordering activity's convenience, and (m) Termination for Cause (See C.1.)

16.   GSA Advantage!

GSA Advantage! is an on-line, interactive electronic information and ordering system that provides on-line access to vendors' schedule prices with ordering information. GSA Advantage! will allow the user to perform various searches across all contracts including, but not limited to:
   (1)   Manufacturer;
   (2)   Manufacturer's Part Number; and
   (3)   Product categories.

Agencies can browse GSA Advantage! by accessing the Internet World Wide Web utilizing a browser (ex.: NetScape). The Internet address is http://www.fss.gsa.gov/.

17.   PURCHASE OF OPEN MARKET ITEMS

NOTE: Open Market Items are also known as incidental items, noncontract items, non-Schedule items, and items not on a Federal Supply Schedule contract. ODCs (Other Direct Costs) are not part of this contract and should be treated as open market purchases. Ordering Activities procuring open market items must follow FAR 8.402(f).

For administrative convenience, an ordering activity contracting officer may add items not on the Federal Supply Multiple Award Schedule (MAS) -- referred to as open market items -- to a Federal Supply Schedule blanket purchase agreement (BPA) or an individual task or delivery order, only if-

    (1)   All applicable acquisition regulations pertaining to the purchase of the items not on the Federal Supply Schedule have been followed (e.g., publicizing (Part 5), competition requirements (Part 6), acquisition of commercial items (Part 12), contracting methods (Parts 13, 14, and 15), and small business programs (Part 19));

    (2)   The ordering activity contracting officer has determined the price for the items not on the Federal Supply Schedule is fair and reasonable;

    (3)   The items are clearly labeled on the order as items not on the Federal Supply Schedule; and

    (4)   All clauses applicable to items not on the Federal Supply Schedule are included in the order.

18.   CONTRACTOR COMMITMENTS, WARRANTIES AND REPRESENTATIONS

a.   For the purpose of this contract, commitments, warranties and representations include, in addition to those agreed to for the entire schedule contract:

    (1)   Time of delivery/installation quotations for individual orders;

    (2)   Technical representations and/or warranties of products concerning performance, total system performance and/or configuration, physical, design and/or functional characteristics and capabilities of a product/equipment/ service/software package submitted in response to requirements which result in orders under this schedule contract.

    (3)   Any representations and/or warranties concerning the products made in any literature, description, drawings and/or specifications furnished by the Contractor.

b.   The above is not intended to encompass items not currently covered by the GSA Schedule contract.

19.   OVERSEAS ACTIVITIES

The terms and conditions of this contract shall apply to all orders for installation, maintenance and repair of equipment in areas listed in the pricelist outside the 48 contiguous states and the District of Columbia, except as indicated below:
NONE

Upon request of the Contractor, the ordering activity may provide the Contractor with logistics support, as available, in accordance with all applicable ordering activity regulations. Such ordering activity support will be provided on a reimbursable basis, and will only be provided to the Contractor's technical personnel whose services are exclusively required for the fulfillment of the terms and conditions of this contract.

20.   BLANKET PURCHASE AGREEMENTS (BPAs)

The use of BPAs under any schedule contract to fill repetitive needs for supplies or services is allowable. BPAs may be established with one or more schedule contractors. The number of BPAs to be established is within the discretion of the ordering activity establishing the BPA and should be based on a strategy that is expected to maximize the effectiveness of the BPA(s). Ordering activities shall follow FAR 8.405-3 when creating and implementing BPA(s).

21.   CONTRACTOR TEAM ARRANGEMENTS

Contractors participating in contractor team arrangements must abide by all terms and conditions of their respective contracts. This includes compliance with Clauses 552.238-74, Industrial Funding Fee and Sales Reporting, i.e., each contractor (team member) must report sales and remit the IFF for all products and services provided under its individual contract.

22.   INSTALLATION, DEINSTALLATION, REINSTALLATION

The Davis-Bacon Act (40 U.S.C. 276a-276a-7) provides that contracts in excess of $2,000 to which the United States or the District of Columbia is a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works with the United States, shall contain a clause that no laborer or mechanic employed directly upon the site of the work shall received less than the prevailing wage rates as determined by the Secretary of Labor. The requirements of the Davis-Bacon Act do not apply if the construction work is incidental to the furnishing of supplies, equipment, or services. For example, the requirements do not apply to simple installation or alteration of a public building or public work that is incidental to furnishing supplies or equipment under a supply contract. However, if the construction, alteration or repair is segregable and exceeds $2,000, then the requirements of the Davis-Bacon Act applies.

The ordering activity issuing the task order against this contract will be responsible for proper administration and enforcement of the Federal labor standards covered by the Davis-Bacon Act. The proper Davis-Bacon wage determination will be issued by the ordering activity at the time a request for quotations is made for applicable construction classified installation, deinstallation, and reinstallation services under SIN 132-8.

23.   SECTION 508 COMPLIANCE.

The EIT standard can be found at: www.Section508.gov/.

24.   PRIME CONTRACTOR ORDERING FROM FEDERAL SUPPLY SCHEDULES.

Prime Contractors (on cost reimbursement contracts) placing orders under Federal Supply Schedules, on behalf of an ordering activity, shall follow the terms of the applicable schedule and authorization and include with each order–

(a)   A copy of the authorization from the ordering activity with whom the contractor has the prime contract (unless a copy was previously furnished to the Federal Supply Schedule contractor); and

(b)   The following statement:

This order is placed under written authorization from _____ dated _____. In the event of any inconsistency between the terms and conditions of this order and those of your Federal Supply Schedule contract, the latter will govern.

25.   INSURANCE—WORK ON A GOVERNMENT INSTALLATION (JAN 1997)(FAR 52.228-5)

(a)   The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b)   Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective—

(1)   For such period as the laws of the State in which this contract is to be performed prescribe; or

(2)   Until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c)   The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

26.   SOFTWARE INTEROPERABILITY.

Offerors are encouraged to identify within their software items any component interfaces that support open standard interoperability. An item's interface may be identified as interoperable on the basis of participation in a Government agency-sponsored program or in an independent organization program. Interfaces may be identified by reference to an interface registered in the component registry located at http://www.core.gov.

27. ADVANCE PAYMENTS

A payment under this contract to provide a service or deliver an article for the United States Government may not be more than the value of the service already provided or the article already delivered. Advance or pre-payment is not authorized or allowed under this contract. (31 U.S.C. 3324)

28. TERMS AND CONDITIONS APPLICABLE TO INFORMATION TECHNOLOGY (IT) PROFESSIONAL SERVICES (SPECIAL ITEM NUMBER 132-51)

28.1   SCOPE

a.   The prices, terms and conditions stated under Special Item Number 132-51 Information Technology Professional Services apply exclusively to IT Services within the scope of this Information Technology Schedule.

b.   The Contractor shall provide services at the Contractor's facility and/or at the ordering activity location, as agreed to by the Contractor and the ordering activity.

28.2   PERFORMANCE INCENTIVES

a.   Performance incentives may be agreed upon between the Contractor and the ordering activity on individual fixed price orders or Blanket Purchase Agreements under this contract in accordance with this clause.

b.   The ordering activity must establish a maximum performance incentive price for these services and/or total solutions on individual orders or Blanket Purchase Agreements.

c.   Incentives should be designed to relate results achieved by the contractor to specified targets. To the maximum extent practicable, ordering activities shall consider establishing incentives where performance is critical to the ordering activity's mission and incentives are likely to motivate the contractor. Incentives shall be based on objectively measurable tasks.

28.3   ORDER

a.   Agencies may use written orders, EDI orders, blanket purchase agreements, individual purchase orders, or task orders for ordering services under this contract. Blanket Purchase Agreements shall not extend beyond the end of the contract period; all services and delivery shall be made and the contract terms and conditions shall continue in effect until the completion of the order. Orders for tasks which extend beyond the fiscal year for which funds are available shall include FAR 52.232-19 (Deviation – May 2003) Availability of Funds for the Next Fiscal Year. The purchase order shall specify the availability of funds and the period for which funds are available.

b.   All task orders are subject to the terms and conditions of the contract. In the event of conflict between a task order and the contract, the contract will take precedence.

28.4   PERFORMANCE OF SERVICES

a.   The Contractor shall commence performance of services on the date agreed to by the Contractor and the ordering activity.

b.   The Contractor agrees to render services only during normal working hours, unless otherwise agreed to by the Contractor and the ordering activity.

c.   The ordering activity should include the criteria for satisfactory completion for each task in the Statement of Work or Delivery Order. Services shall be completed in a good and workmanlike manner.

d.   Any Contractor travel required in the performance of IT Services must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Established

Federal Government per diem rates will apply to all Contractor travel. Contractors cannot use GSA city pair contracts.

28.5   STOP-WORK ORDER (FAR 52.242-15) (AUG 1989)

(a)   The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either-
      (1)   Cancel the stop-work order; or

      (2)   Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b)   If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if-
      (1)   The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

      (2)   The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c)   If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d)   If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

28.6   INSPECTION OF SERVICES

The Inspection of Services–Fixed Price (AUG 1996) (Deviation – May 2003) clause at FAR 52.246-4 applies to firm-fixed price orders placed under this contract. The Inspection–Time-and-Materials and Labor-Hour (JAN 1986) (Deviation – May 2003) clause at FAR 52.246-6 applies to time-and-materials and labor-hour orders placed under this contract.

28.7   RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City, or otherwise) covering work of this character. If the end product of a task order is software, then FAR 52.227-14 (Deviation – May 2003) Rights in Data – General, may apply.

28.8   RESPONSIBILITIES OF THE ORDERING ACTIVITY

Subject to security regulations, the ordering activity shall permit Contractor access to all facilities necessary to perform the requisite IT Services.

28.9   INDEPENDENT CONTRACTOR

All IT Services performed by the Contractor under the terms of this contract shall be as an independent Contractor, and not as an agent or employee of the ordering activity.

28.10   ORGANIZATIONAL CONFLICTS OF INTEREST

a.   Definitions.

"Contractor" means the person, firm, unincorporated association, joint venture, partnership, or corporation that is a party to this contract.

"Contractor and its affiliates" and "Contractor or its affiliates" refers to the Contractor, its chief executives, directors, officers, subsidiaries, affiliates, subcontractors at any tier, and consultants and any joint venture involving the Contractor, any entity into or with which the Contractor subsequently merges or affiliates, or any other successor or assignee of the Contractor.

An "Organizational conflict of interest" exists when the nature of the work to be performed under a proposed ordering activity contract, without some restriction on ordering activities by the Contractor and its affiliates, may either (i) result in an unfair competitive advantage to the Contractor or its affiliates or (ii) impair the Contractor's or its affiliates' objectivity in performing contract work.

b.   To avoid an organizational or financial conflict of interest and to avoid prejudicing the best interests of the ordering activity, ordering activities may place restrictions on the Contractors, its affiliates, chief executives, directors, subsidiaries and subcontractors at any tier when placing orders against schedule contracts. Such restrictions shall be consistent with FAR 9.505 and shall be designed to avoid, neutralize, or mitigate organizational conflicts of interest that might otherwise exist in situations related to individual orders placed against the schedule contract. Examples of situations, which may require restrictions, are provided at FAR 9.508.

28.11   INVOICES

The Contractor, upon completion of the work ordered, shall submit invoices for IT services. Progress payments may be authorized by the ordering activity on individual orders if appropriate. Progress payments shall be based upon completion of defined milestones or interim products. Invoices shall be submitted monthly for recurring services performed during the preceding month.

28.12   PAYMENTS

For firm-fixed price orders the ordering activity shall pay the Contractor, upon submission of proper invoices or vouchers, the prices stipulated in this contract for service rendered and accepted. Progress payments shall be made only when authorized by the order. For time-and-materials orders, the Payments under Time-and-Materials and Labor-Hour Contracts at FAR 52.232-7 (DEC 2002), (Alternate II – Feb 2002) (Deviation – May 2003) applies to time-and-materials orders placed under this contract. For labor-hour orders, the Payment under Time-and-Materials and Labor-Hour Contracts at FAR 52.232-7 (DEC 2002), (Alternate II – Feb 2002) (Deviation – May 2003)) applies to labor-hour orders placed under this contract.

28.13   RESUMES

Resumes shall be provided to the GSA Contracting Officer or the user ordering activity upon request.

28.14   INCIDENTAL SUPPORT COSTS

Incidental support costs are available outside the scope of this contract. The costs will be negotiated separately with the ordering activity in accordance with the guidelines set forth in the FAR.

28.15   APPROVAL OF SUBCONTRACTS

The ordering activity may require that the Contractor receive, from the ordering activity's Contracting Officer, written consent before placing any subcontract for furnishing any of the work called for in a task order.

28.16   DESCRIPTION OF IT/EC SERVICES AND PRICING

Part Number	Job Title	Price/hr
CI-005	Application Database Administrator	$100.18
CI-008	Application Programmer/Analyst	$129.70
CI-010	Application Project Manager	$179.68
CI-012	Business Reengineering Analyst	$131.81
CI-014	Business Systems Analysis/Programming Specialist	$84.36
CI-015	Business Systems Analyst/Programmer	$47.45
CI-017	Business Systems Engineer	$68.54
CI-020	Computer Programmer	$63.27
CI-022	Computer Programmer Analyst II	$79.09
CI-023	Computer Programmer Analyst III	$100.18
CI-025	Computer Software Trainer III	$63.27
CI-027	Computer Systems Analyst	$100.18
CI-029	Computer Systems Analyst II	$63.27
CI-030	Computer Systems Analyst III	$100.18
CI-032	Data Management Specialist	$105.45
CI-033	Database Programmer I	$110.72
CI-034	Database Programmer II	$126.54
CI-035	Database Specialist	$100.18
CI-039	Engineer	$84.36
CI-040	Engineer, Principal	$115.99
CI-045	Functional Analyst, Principal	$115.99
CI-046	Functional Analyst, Senior	$76.98
CI-048	Illustrator	$36.91
CI-049	Information Technology Policy Analyst	$119.16
CI-051	Information Technology Specialist, Senior	$89.63
CI-054	Internet Program Manager	$121.27
CI-055	Internet Project Manager	$121.27
CI-056	Internet Systems Architect	$121.27
CI-057	Internet Systems Engineer	$100.18
CI-058	Internet Systems Engineer, Junior	$79.09
CI-059	Internet Systems Engineer, Senior	$127.52
CI-061	Management Analyst	$79.09
CI-063	Operating System Administrator	$75.92
CI-067	Program Manager	$115.99
CI-068	Program Manager, Senior	$158.17
CI-069	Quality Assurance Systems Analyst	$46.40
CI-071	Quality Improvement Advisor	$126.54
CI-072	Quality Improvement Assistant	$89.63
CI-074	Reengineering Analyst, Senior	$152.90
CI-078	Software Engineer, Principal	$126.54
CI-079	System Administrator, Non-UNIX	$104.22
CI-080	System Administrator, UNIX	$194.03
CI-082	Systems Analyst, Senior	$100.18
CI-083	Systems Architect	$179.68
CI-085	Systems Engineer, Senior	$110.72
CI-088	Systems Integration Technical Director	$147.63
CI-090	Task Team Leader	$110.72
CI-096	Test Engineer	$112.56
CI-098	Trainer, Senior	$115.99
CI-099	Training Developer	$89.63

Labor Category Descriptions:

Commercial Job Title: <u>Application Database Administrator</u> – CI-005

Minimum/General Experience: A minimum of 6 years of experience in designing, developing,

testing and implementing large scale database systems; a minimum of 4 years of experience with logical design, requirements definition, and data administration with large scale systems or client/server environments; a minimum of 2 years of experience in relevant application database design, development, and implementation;

Functional Responsibility: Analyzes data entities, designs physical database schemas, and tune databases for maximum performance. Uses entity-relationship-diagramming (ERD) tools to model logical and physical database schemas to establish all entities, attributes, and their relationships to one another. Determines normalization form appropriate for databases. Programs triggers and database procedures. Troubleshoots database locks and performance problems.

Minimum Education: a bachelors degree in computer science, information systems, or a related field.

Commercial Job Title: <u>Application Programmer/Analyst</u> – CI-008

Minimum/General Experience: A minimum of 4 years of experience in developing, prototyping, testing solutions for large scale computer systems implementation; 2 years experience in implementing application solutions.

Functional Responsibility: Codes according to design specifications. Uses interactive development environments (IDE's) to create, connect, compile, and build modules used for software systems. Programs in third-generation 3GL and forth-generation 4GL languages such as C, C++, Java, Visual Basic, Performs unit tests, debugs code developed. Does rudimentary design of small sections of an application where necessary.

Minimum Education: bachelors degree in Computer Science or related field

Commercial Job Title: <u>Application Project Manager</u> – CI-010

Minimum/General Experience: 10+ years of experience in implementing large scale information technology solutions; 8+ years of management experience; a minimum of 2 years experience with implementing the relevant application.

Functional Responsibility: Manages teams of developers and other resources, provides status reporting, resolves issues impeding project progress. Responsible for the ultimate success of solutions by working with the project team to define a project's scope and details and create a plan for success. This person ensures the timely and high-quality completion of all deliverables by learning and understanding the software development lifecycle which combines best practices from Object Oriented Analysis and Design (OOAD), Extreme Programming (XP), and structured analysis and design (SASD). This person will manage project teams, which can vary from 6-12 people to 20-plus people, and often will manage client-based members, as well. As the client's primary point of contact, the Application Project Manager ensures the client is kept abreast of all pertinent details and that expectations are well managed. The Application Project Manager must be equally comfortable working with clients in support of business development, with business analysts to define strategic goals, with creatives on concept development, and with engineers throughout technical development. They must be able to balance client, technical, creative, user and strategic requirements as they play a crucial role in creating a truly collaborative environment in which all contributions are valued and respected. This person is a hands-on project leader who tackles the details with team members, goes beyond the traditional limits of project management and recognizes problems associated with heavy methodologies. This person is committed to cutting-edge, lightweight methodologies to support rapid enterprise portal development and can manage short, iterative cycles with new functionality deployment every two to three weeks. Specific responsibilities include Managing all project-related resources and activities to ensure the project is completed on time, on budget and to the client's complete satisfaction; Managing project leads from core disciplines: Strategy, Interactive Services, Engineering/ Technology, and Enterprise Application Integration; Learning and appling the necessary software development life-cycle (SDLC); Determining which pieces apply to specific projects based on an analysis of requirements and client culture; Motivating and inspiring the team to produce truly exceptional work by ensuring everyone has the information, tools and structure to excel; Ensuring that all team members clearly understand roles, responsibilities, and deliverables; Keeping project constituencies informed of overall status and critical dependencies; Interacting with the client to define requirements, manage expectations and ensure satisfaction. Be able to clearly articulate project issues and concepts to clients. Assume a supportive role with Account and Partnership managers during the sales process, and a project leadership role during the delivery process. Manage knowledge transfer by working with the client to develop a plan that identifies how and when development responsibility will be passed to the client. Act as the point of contact and ultimate problem solver for all project issues, challenges and roadblocks. Identify and manage relationships with third-

party product and service providers in support of project requirements. Act as the direct client contact once the Statement of Work is signed and identify new areas where Collective Intelligence, Inc can add value for our clients.

Minimum Education: A 4-year college degree in a business, computer science, information systems or related field.

Commercial Job Title: Business Reengineering Analyst – CI-012

Minimum/General Experience: A minimum of six years of Business Process Reengineering experience with three years experience within the last five years in the analysis, design/redesign, development, integration, and implementation of large scale business processes/systems.

Functional Responsibility: Analyzes existing business processes and provides documented, improved processes. Applies industrial engineering skills to model existing business processes, measure performance, and provide improvements. Modeling encompasses both automated and manual processes, and uses process flow diagrams, activity diagrams and workflow diagrams. Applies analysis techniques such as context diagrams, current physical system, and proposed physical system.

Minimum Education: A four year college degree in a business, computer science, information systems or related field.

Commercial Job Title: Business Systems Analysis/Programming Specialist – CI-014

Minimum/General Experience: A minimum of ten years of progressively more difficult systems experience with five years experience within the last seven years at a senior systems analyst/programmer level working on projects with varied system configurations including data base, batch, LAN, and/or interactive systems in a main frame and/or mini/microcomputer environment.

Functional Responsibility: Leads technical staff through the analysis of complex data processing systems, both current and proposed, translating business domain expertise into detailed system/program requirements. Documents high-level system architectures. Defines interfaces and layers of the architecture. May use structured analysis and design or object-oriented analysis and design techniques to determine system requirements and physical characteristics. Programs limited portions of the system in various languages.

Minimum Education: Associates Degree

Commercial Job Title: Business Systems Analyst/Programmer – CI-015

Minimum/General Experience: A minimum of ten years of progressively more difficult systems experience with five years experience within the last seven years at a senior systems analyst/programmer level working on projects with varied system configurations.

Functional Responsibility: Analyzes complex data processing systems, both current and proposed, translating business domain expertise into detailed system requirements. Uses structured and object-oriented techniques to determine system models. Programs various components of the system including graphical user interfaces (GUI's), data base access interfaces, and business logic.

Minimum Education: Four year college degree.

Commercial Job Title: Business Systems Engineer – CI-017

Minimum/General Experience: A minimum of eight years of progressively more difficult systems experience with three years experience within the last five years in architecting large scale business systems. Five years experience in one or more of the structured programming languages applicable to the site supported.

Functional Responsibility: Responsible for business system architectural design. Combines technologies, and COTS to provide the most cost effective solution. Designs the high-level architecture, interfaces of components, and certain modules of the system. Uses input from analysts and end users to determine system functionality.

Minimum Education: A four year college degree in a business, computer science, information systems or related field.

Commercial Job Title: Computer Programmer – CI-020

Minimum/General Experience: 6 months experience coding in 3GL languages such as C, Visual Basic, Java

Functional Responsibility: Implements software systems according to design specification. Computer programmers write, test, and maintain the detailed instructions that computers must follow to perform their functions. They also conceive, design, and test logical structures for solving problems by computer. Programmers write specific programs by breaking down each step into a logical series of instructions the computer can follow. They then code these instructions in a conventional programming language, such as COBOL; an artificial intelligence language, such as Prolog; or one of the most advanced function-oriented or object-oriented languages, such as Java, C++, or Visual Basic. Programmers test a program by running it, to ensure the instructions are correct and it produces the desired information. If errors do occur, the programmer must make the appropriate change and recheck the program until it produces the correct results, a process called debugging.

Minimum Education: Associate degree from accredited college.

Commercial Job Title: <u>Computer Programmer Analyst II – CI-022</u>

Minimum/General Experience: Possesses a minimum of two years of experience with relevant operating systems and applications. Positions require experience with UNIX and MS-DOS applications.

Functional Responsibility: Analyzes and implements small sections of systems. Write, test, and maintain the detailed instructions that computers must follow to perform their functions. They also conceive, design, and test logical structures for solving problems by computer. Computer Programmer Analyst II solve computer problems and enable computer technology to meet individual needs of an organization. They help an organization realize the maximum benefit from its investment in equipment, personnel, and business processes. This process may include planning and developing new computer systems or devising ways to apply existing systems' resources to additional operations. Systems analysts may design new systems, including both hardware and software, or add a new software application to harness more of the computer's power. Most systems analysts work with a specific type of system that varies with the type of organization they work for—for example, business, accounting or financial systems, or scientific and engineering systems.

Minimum Education: Associate degree from accredited college.

Commercial Job Title: <u>Computer Programmer Analyst III – CI-023</u>

Minimum/General Experience: Position requires a minimum of four years experience and knowledge in relevant software and operating systems, such as communications software, emulation software, C programming language, JAVA, UNIX and RDBMS.

Functional Responsibility: Analyzes system requirements, designs systems, modules, and unit tests. Implements designs. Write, test, and maintain the detailed instructions that computers must follow to perform their functions. They also conceive, design, and test logical structures for solving problems by computer. Computer Programmer Analyst II solve computer problems and enable computer technology to meet individual needs of an organization. They help an organization realize the maximum benefit from its investment in equipment, personnel, and business processes. This process may include planning and developing new computer systems or devising ways to apply existing systems' resources to additional operations. Systems analysts may design new systems, including both hardware and software, or add a new software application to harness more of the computer's power. Most systems analysts work with a specific type of system that varies with the type of organization they work for—for example, business, accounting or financial systems, or scientific and engineering systems. Able to design new systems from the ground up. Able to specify architectures, coding conventions and standards, and determine appropriate methodologies for organizations and projects.

Minimum Education: A four year college degree in a business, computer science, information systems or related field.

Commercial Job Title: <u>Computer Software Trainer III – CI-025</u>

Minimum/General Experience: Must have a minimum of four years of instructor/training experience.

Functional Responsibility: Prepares and delivers training on computer application software. Research, coordinate and provide training for staff on computer software including computer operating systems, custom applications, and commercial off-the-shelf (COTS) software. Evaluate and document training plans and workshops. Conduct needs assessments to determine staff needs in information technology training, and establish goals, objectives and priorities. Establish an environment conducive to achieving these objectives, and which addresses different learning modalities and styles. Develop training modules in various modalities (live workshops, web-based tutorials) for faculty and staff on college/district standard software applications and computer operating systems. Regularly redesign training programs to meet changing needs and objectives. Deliver training in one-on-one, small or large group settings; present

information in a logical, accurate and effective manner. Research, design, write and produce clear user documentation and other training materials (websites, multimedia and online tutorials).

Minimum Education: High School Diploma

Commercial Job Title: <u>Computer Systems Analyst</u> – CI-027

Minimum/General Experience: 4 years experience that provides the required knowledge and skills.

Functional Responsibility: Design and implement modifications or enhancements to forms, menus,

and reports. Define the goals of the system and divide the solutions into individual steps and separate procedures. Analysts use techniques such as structured analysis, data modeling, information engineering, mathematical model building, sampling, and cost accounting to plan the system. They specify the inputs to be accessed by the system, design the processing steps, and format the output to meet the users' needs. They also may prepare cost-benefit and return-on-investment analyses to help management decide whether implementing the proposed system will be financially feasible.

Minimum Education: Bachelors degree in computer science/management information systems

Commercial Job Title: <u>Computer Systems Analyst II</u> – CI-029

Minimum/General Experience: Possesses a minimum of two years of database experience, three years of systems analysis, broad knowledge of and experience with computer systems and technologies, strong problem solving and analysis skills, and good interpersonal skills.

Functional Responsibility: Design and implement modifications or enhancements to forms, menus,

and reports. Design relational database systems. Design architectural layers for computers systems. Design and implement modifications or enhancements to forms, menus, and reports. Define the goals of the system and divide the solutions into individual steps and separate procedures. Analysts use techniques such as structured analysis, data modeling, information engineering, mathematical model building, sampling, and cost accounting to plan the system. They specify the inputs to be accessed by the system, design the processing steps, and format the output to meet the users' needs. They also may prepare cost-benefit and return-on-investment analyses to help management decide whether implementing the proposed system will be financially feasible.

Minimum Education: Bachelors degree in computer science/management information systems

Commercial Job Title: <u>Computer Systems Analyst III</u> – CI-030

Minimum/General Experience: Possesses a minimum of five years of database experience; five years of systems analysis; broad knowledge of and experience with computer systems, software architectures and technologies; strong problem solving and analysis skills; and very good interpersonal skills. Very experienced with determining and defining user roles and interactions with the system.

Functional Responsibility: Design and implement modifications or enhancements to forms, menus,

and reports. Design and implement data warehousing architectures. Design relational database systems. Design architectural layers for computers systems. Design and implement modifications or enhancements to forms, menus, and reports. Define the goals of the system and divide the solutions into individual steps and separate procedures. Analysts use techniques such as structured analysis, data modeling, information engineering, mathematical model building, sampling, and cost accounting to plan the system. They specify the inputs to be accessed by the system, design the processing steps, and format the output to meet the users' needs. They also may prepare cost-benefit and return-on-investment analyses to help management decide whether implementing the proposed system will be financially feasible. Computer Systems Analyst III's lead staff and other analysts through difficult sections of the system.

Minimum Education: Bachelors degree in computer science/management information systems

Commercial Job Title: <u>Data Management Specialist</u> – CI-032

Minimum/General Experience: Ten years of progressively more complex experience in areas of systems analysis/programming and data communications. Three years of experience with database management systems.

Functional Responsibility: Directs systems analyses and feasibility studies. Assist customer in the planning and coordinating acquisition and implementation of systems. Participates in the conceptual design/redesign of data base systems and logical models for use in business systems reengineering. Analyzes proposed and existing system used in processing applications in terms of data communications and database management/structure, requirements and costs. Prepares studies and gives presentations on current data communications concepts.

Minimum Education: A four year college degree in a business, computer science, information systems or related field.

Commercial Job Title: Database Programmer I – CI-033

Minimum/General Experience: Minimum of 3 years progressive data processing experience in the design and development of database applications.

Functional Responsibility: Application programmer specializing in the database layer. Creates database access routines for the database. Uses database connection technologies such as JDBC, ODBC, ADO, SQL*Net, and RDO. Programs embedded SQL to execute database queries, updates, and insertions, or call procedures to perform those functions. May create stored procedures and triggers to allocate portions of the programming task.

Minimum Education: Bachelors degree in computer science required.

Commercial Job Title: Database Programmer II – CI-034

Minimum/General Experience: Minimum of 5 years progressive data processing experience in the design and development of database applications. Supervisory experience in managing junior database programmers and providing them direction.

Functional Responsibility: Application programmer specializing in the database layer. Capable of designing database access frameworks. Application programmer specializing in the database layer. Creates database access routines for the database. Uses database connection technologies such as JDBC, ODBC, ADO, SQL*Net, and RDO. Programs embedded SQL to execute database queries, updates, and insertions, or call procedures to perform those functions. May create stored procedures and triggers to allocate portions of the programming task. Works with application developers and database administrators to ensure a smooth integration of the application to the database.

Minimum Education: Bachelors degree in computer science required.

Commercial Job Title: Database Specialist – CI-035

Minimum/General Experience: A minimum of seven years of progressively more difficult systems experience with five years experience within the last six years at a data base specialist level working with varied system configuration in a main frame and/or mini/microcomputer environment and with data base languages applicable to the site supported. A minimum of four years experience within the last five years in the logical/physical design of databases on operating systems applicable to the site supported. A minimum of three years experience within the last five years in one or more of the data base software languages applicable to the site and application(s) supported.

Functional Responsibility: Logical and physical database design, reviews logical and/or physical designs of existing data base(s), and makes recommendations for tuning to assure maximum operating efficiency. Data analysis, database design, development activities, and implementation, as required, for databases and database conversions. Database restructuring activities. Works with users and information systems development staff to determine data storage and access requirements.

Minimum Education: . A four year college degree in a business, computer science, information systems or related field.

Commercial Job Title: Engineer – CI-039

Minimum/General Experience: 4+ years experience (or an equivalent combination of training and professional work experience).

Functional Responsibility: Develops and refines new engineering techniques to enhance quality and productivity. Engineers work with the hardware and software aspects of systems design and development. They usually apply the theories and principles of science and mathematics to design hardware, software, networks, and processes and to solve technical problems. Whereas their work emphasizes the application of theory, computer engineers may also involved in building prototypes. Computer hardware engineers usually design, develop, test, and supervise the manufacture of computer hardware—such as chips or device controllers. Software engineers, on the other hand, can be involved in the design and development of software systems for control and automation of manufacturing, business, and management

processes. They may research, design, and test operating system software, compilers—software that converts programs for faster processing—and network distribution software.

Minimum Education: Bachelors degree or other technical degree

Commercial Job Title: <u>Engineer, Principal</u> – CI-040

Minimum/General Experience: 10+ years directly related work experience.

Functional Responsibility: Develops and refines new engineering techniques to enhance quality and productivity. Establishes performance and technical standards. Generates and approves project and testing specifications. May lead or coordinate complex task/project teams. Develops and refines new engineering techniques to enhance quality and productivity. Engineers work with the hardware and software aspects of systems design and development. They usually apply the theories and principles of science and mathematics to design hardware, software, networks, and processes and to solve technical problems. Whereas their work emphasizes the application of theory, computer engineers may also involved in building prototypes. Computer hardware engineers usually design, develop, test, and supervise the manufacture of computer hardware—such as chips or device controllers. Software engineers, on the other hand, can be involved in the design and development of software systems for control and automation of manufacturing, business, and management processes. They may research, design, and test operating system software, compilers—software that converts programs for faster processing—and network distribution software. Principal engineers design and develop very complex areas of systems involving real-time processing, sophisticated state machines, direct hardware access, and component communication mechanisms.

Minimum Education: Bachelors degree in a technical discipline

Commercial Job Title: <u>Functional Analyst, Principal</u> – CI-045

Minimum/General Experience: 10 years experience.

Functional Responsibility: Possesses and applies extensive knowledge of one or more of the functional applications analyst functions. Provides various types of management and technical support to projects in areas such as training, logistics, acquisition management, configuration management, data management, program control and/or manpower planning. Requires the ability to perform the highest degree of complexity and difficulty. Develops and monitors project tasks and schedules. Manages the work of task or project teams. The Functional Analyst may create and conduct workshops for functional areas; manage scope for knowledgeable functional area; create quality functional spec documents from workshops; provide complex data mapping to multiple backend systems; develop test approach and scope documents along with test scripting docs. This position will provide user acceptance test planning and execution, prepare operations handoff documentation, prepare training documentation and provide mentoring to junior functional analysts, including some management for key phase deliverables.

Minimum Education: Bachelors degree in related discipline

Commercial Job Title: <u>Functional Analyst, Senior</u> – CI-046

Minimum/General Experience: minimum of eight years experience in applicable logistics or business management disciplines.

Functional Responsibility: Possesses and applies extensive knowledge of one or more of the functional applications analyst functions. Provides various types of management and technical support to projects in areas such as training, logistics, acquisition management, configuration management, data management, program control and/or manpower planning. Requires the ability to perform the highest degree of complexity and difficulty. This position will provide user acceptance test planning and execution, prepare operations handoff documentation, prepare training documentation and provide mentoring to junior functional analysts, including some management for key phase deliverables.

Minimum Education: Bachelor's degree from an accredited institution

Commercial Job Title: <u>Illustrator</u> – CI-048

Minimum/General Experience: two years relevant experience

Functional Responsibility: Graphics designer, drawing specialist. Preparation of technical or conceptual illustrations, photo-simulations, presentation graphics, posters, brochures. May perform formatting of GIS-generated maps for

publication. Interacts with staff, many times directly with client. Designs color schemes, layout schemes. Uses computer drawing tools such as Adobe, Corel, and AutoCAD.

Minimum Education: Requires one year of technical school

Commercial Job Title: Information Technology Policy Analyst – CI-049

Minimum/General Experience: Minimum of 8 years of progressively more difficult experience in developing, examining, evaluating and implementing policy and/or standards for large companies and/or organizations.

Functional Responsibility: Develops policy, procedures, and standards for information technology that support business requirements. Evaluates current business strategies and practices to create information technology standards and procedures that enhance competitiveness for the organization. Assesses new and emerging information technologies, changing organizational requirements, and cost impacts related to these technologies. Recommends and implements standardization of organizational practices related to information technology.

Minimum Education: A four year college degree in information systems, business, computer science, or related field.

Commercial Job Title: Information Technology Specialist, Senior – CI-051

Minimum/General Experience: A minimum of 6 years of progressively more difficult experience in developing, researching, testing, implementing and/or integrating new information technology to support existing business systems.

Functional Responsibility: Responsible for identifying new and emerging technology to support strategic planning initiatives required to meet business needs. Conducts assessments, evaluations, selections, site surveys, requirements analysis and definition, technology prototyping, and cost analyses related to information technology. Performs complex analytical studies and activities on complex information technology systems, projects, and/or teleprocessing networks/systems.

Minimum Education: A four year college degree in information systems, business, computer science, or related field.

Commercial Job Title: Internet Program Manager – CI-054

Minimum/General Experience: 15+ years project and program management experience in a client server and/or Internet implementation arena. Ability to maintain cooperative working relationships with those contacted in the course of work activities; Ability to communicate effectively verbally and in writing; Ability to work with limited supervision; Skill in creative thinking and analytical problem solving; Skill in training others; Skill in public speaking and interpersonal communication; Ability to work with groups and individuals at every level of the organization; Skill in word processing and basic programs; Knowledge of supervisory techniques; Skill in reading, writing, and basic math; Knowledge of modern office procedures; Ability to maintain files, records, and reports; Skill in document composition; Ability to coordinate multiple tasks efficiently; and Skill in counseling.

Functional Responsibility: Provide business, technical, and personnel management across multiple projects, where Internet technologies are employed. Produces project, risk management, and contingency plans, supervises staff, coordinates multiple project/programs that are interrelated, manages schedules, and provides management status reports. Addresses issue resolution and escalation. Makes staffing decisions within the assigned program including hiring, training, performance evaluation, scheduling of work load, and retention of assigned personnel. Makes maintenance and purchasing decisions for equipment, tools, and supplies within the assigned program.

Minimum Education: Masters degree in technical field

Commercial Job Title: Internet Project Manager – CI-055

Minimum/General Experience: 11 to 13 years experience that provides the required knowledge and skills.

Functional Responsibility: Provide business, technical, and personnel management across single projects, where Internet technologies are employed. Produces project, risk management, and contingency plans, supervises staff, manages schedules, and provides management status reports. Addresses issue resolution and escalation. Makes staffing decisions including hiring, training, performance evaluation, scheduling of work load, and retention of assigned personnel. Makes maintenance and purchasing decisions for equipment, tools, and supplies within the assigned project. Manages fiscal plan.

Minimum Education: Bachelors degree (or equivalent)

Commercial Job Title: <u>Internet Systems Architect</u> – CI-056

Minimum/General Experience: 8 to 10 years experience that provides the required knowledge and skills. Background experience includes systems analysis, systems implementation, and possibly systems engineering or software engineering. System architects have been involved in several different large, complex system implementations, and can determine appropriate patterns for new implementations.

Functional Responsibility: Design systems architectures for applications utilizing Internet technologies such as XML, JSP, ASP, EJB, and J2EE. Systems Architects analyze general system requirements including standards, coding conventions, security, error handling, and technologies to determine an appropriate architecture for the implementation. An architectural specification is created, and potentially an architectural plan to put the specified architecture into place. Systems architects divide the functions of the system into layers and apportion responsibility, tools, and technologies to the layers.

Minimum Education: Bachelors degree (or equivalent)

Commercial Job Title: <u>Internet Systems Engineer</u> – CI-057

Minimum/General Experience: 3 to 6 years of experience developing Internet applications. Internet applications are characterized by utilizing a thin-client (browser), utilizing web servers, accessing a database or middleware software connection to other systems, and producing HTML, XML, XSL, JavaScript, and other associated Internet languages.

Functional Responsibility: Specializes in Internet software applications. Analyze system requirements and develop design alternatives to satisfy those requirements. Provide technical leadership developing solutions for engineering studies and Internet Applications. Plan project coordination, management and engineering. Provides comprehensive definition of all aspects of system development from analysis of mission needs to verification of system performance. Performs evaluation of alternatives and assessment of risks and costs. Recommend solutions architectures.

Minimum Education: Bachelor degree (or equivalent)

Commercial Job Title: <u>Internet Systems Engineer, Junior</u> – CI-058

Minimum/General Experience: 1 to 3 years of experience developing Internet applications. Internet applications are characterized by utilizing a thin-client (browser), utilizing web servers, accessing a database or middleware software connection to other systems, and producing HTML, XML, XSL, JavaScript, and other associated Internet languages.

Functional Responsibility: Specializes in Internet software applications. Analyze system requirements and develop design alternatives to satisfy those requirements. Provide architectural guidance for application design by analyzing alternatives and documenting tradoffs for different approaches. Performs many of the same functions as systems analysts, but for Internet applications.

Minimum Education: requirements Bachelors degree (or equivalent) or 1 to 5 years of experience that provides the required knowledge and skills.

Commercial Job Title: <u>Internet Systems Engineer, Senior</u> – CI-059

Minimum/General Experience: 3 to 6 years of experience developing Internet applications with a total of 8 to 10 years experience designing information systems.

Functional Responsibility: Analyze system requirements and develop design alternatives and architectures to satisfy those requirements. Provide technical leadership developing solutions for engineering studies and Internet Applications. Establish application frameworks and standards for projects involving Internet technologies. Provide architectural guidance for application design by analyzing alternatives and documenting tradoffs for different approaches. Performs many of the same functions as systems analysts, but for Internet applications.

Minimum Education: Bachelors degree (or equivalent)

Commercial Job Title: <u>Management Analyst</u> – CI-061

Minimum/General Experience: Requires 5+ years of experience in business management including Knowledge of: the organization, operation and problems of government; principles and methods of public administration; research, statistical techniques and methodology; problem resolution methods. Skill in: operating computer systems and applications for information storage, retrieval and presentation. Ability to: work tactfully and effectively with a wide variety of people and interests; compile and analyze data and formulate recommendations; communicate clearly orally and in writing; learn, interpret and apply policies, procedures, rules and regulations; apply legal and legislative mandates to operational policies and procedures; analyze problems and prepare clear, concise reports.

Functional Responsibility: Develops information resources management policies and procedures designed to provide management control of system development activities, including analysis of current procedures and policies to determine continued applicability. Performs complex, technical administrative duties in providing staff assistance to departments/agencies; conducts special studies, surveys and research assignments in a variety of areas. Conducts organizational, administrative, fiscal and personnel studies; conducts surveys and collects information on operational and administrative problems; develops recommendations for problem resolution; coordinates and participates in special projects; compiles and prepares reports, memoranda, policies, manuals and newsletters; prepares tables, charts and graphs to illustrate distribution and trends of statistical and financial data; assists in the preparation of the annual budget by obtaining, compiling, entering data and monitoring expenditures.

Minimum Education: A four year college degree in business, computer science, information systems or related field, or equivalent job experience.

Commercial Job Title: Operating System Administrator – CI-063

Minimum/General Experience: A minimum of 4 years of progressively more difficult systems experience with 2 years experience within the last 3 years in software testing, installation, configuration and system problem resolution of computer operating systems.

Functional Responsibility: Configures, installs, and tunes operating systems such as UNIX and Windows. Installs performance gathering utilities, configures security policy, and maintains user accounts. Responsible for maintaining the integrity and security of servers, desktops, and systems which support the organization. Develops programs and support systems to keep systems current with changing technologies.

Minimum Education: A four-year college degree in a business, computer science, information systems or related field.

Commercial Job Title: Program Manager – CI-067

Minimum/General Experience: 15 years experience managing large, complex programs involving multiple projects. Requires excellent organizational and time management skills. Must have proven analytical/problem solving abilities. Requires excellent interpersonal and written and oral communication skills. Must be able to work comfortably and effectively with or without supervision, either at own initiative or under direction.

Functional Responsibility: Planning and directing technological improvements and project management implementation. Administer and coordinate operational activities of assigned program; make decisions on specific operating problems and issue instructions in accordance with departmental policies and procedures. Plan, develop and implement goals and objectives of assigned program or unit in conjunction with appropriate division director and/or department head; evaluate program objectives on a continual basis; implement changes to existing policies and procedures as appropriate. Determine fiscal requirements and prepare budgetary recommendations; monitor costs and expenditures of program activities and authorize expenditures of program funds. Plan and conduct meetings with subordinates to ensure compliance with established practices and keep employees abreast of current standards; develop, in conjunction with others, appropriate training and employee orientation programs. Assist in the selection, provision and control of material resources required for subsequent performance of duties to include equipment, supplies, space and facilities; establish standards to ensure cost containment and to optimize working environment.

Minimum Education: Bachelor's or advanced degree from an accredited institution

Commercial Job Title: Program Manager, Senior – CI-068

Minimum/General Experience: 20 years experience managing large, complex programs involving multiple projects.

Functional Responsibility: Planning and directing technological improvements and project management implementation. Manage a diverse group of functional activities, subordinate groups of technical and administrative personnel.

Minimum Education: Masters degree in business management or information technology

Commercial Job Title: Quality Assurance Systems Analyst – CI-069

Minimum/General Experience: A minimum of five years of progressively more difficult systems experience with two years experience within the last three years at a systems analyst/programmer level working on projects with varied system configurations including data base, batch, LAN, and/or interactive systems in a main frame and/or mini/microcomputer environment. A minimum of three years experience within the last five years with an operating system and structured programming language applicable to the site/application supported. A minimum of three years experience in one or more of the database software languages applicable to the site/applicable supported.

Functional Responsibility: Analysts, who do more in-depth testing of products. Design quality programs, mechanisms, and audits to ensure quality results for system implementations. Develops and implements quality assurance standards, processes, and controls. Develops methods for inspection, testing, sampling, and training. Evaluates production capabilities and recommends improvements. May assist in developing quality assurance policies and procedures.

Minimum Education: A four year college degree in a business, computer science, information systems or related field.

Commercial Job Title: Quality Improvement Advisor – CI-071

Minimum/General Experience: 6+ years of experience (or an equivalent combination of training and professional work experience) in information technology; including experience in applying quality guidelines, conducting compliance audits and system validation.

Functional Responsibility: Advises managers, supervisors, and other staff on quality improvement processes, presents workshops, and performs audits of quality processes. Develops and implements quality assurance standards, processes, and controls. Directs quality assurance program and ensures quality problems are identified and resolved. Evaluates systems, analyzes data, evaluates products and technology and establishes quality control procedures. Oversees inspections and audits. Diagnose problems, recommend solutions, and determine if program requirements have been met.

Minimum Education: This position requires a Bachelors degree in Computer Science or business administration

Commercial Job Title: Quality Improvement Assistant – CI-072

Minimum/General Experience: 2+ years in software development plus 4+ years of experience (or an equivalent combination of training and professional work experience) testing software systems.

Functional Responsibility: Assist in providing consultation to managers, supervisors, and other staff on quality improvement processes. Performs testing of software products to certify quality and adherence to specifications. Inspects and analyzes tests. Records results of all testing procedures. Develops, implements, and executes certification programs, quality assurance standards, and testing strategies.

Minimum Education: This position requires a Bachelors degree in Computer Science or business administration

Commercial Job Title: Reengineering Analyst, Senior – CI-074

Minimum/General Experience: 4+ years of experience (or an equivalent combination of training and professional work experience) analyzing software systems, development methodologies, and information technology infrastructure.

Functional Responsibility: Consults with senior managers to provide process change for quality improvements. Design and conduct executive level workshops. Facilitate process improvements. Manages teams of consultants. Inspects development processes to determine deficiencies and makes recommendations for process improvement.

Minimum Education: This position requires a Bachelors degree in Computer Science or business administration

Commercial Job Title: Software Engineer, Principal – CI-078

Minimum/General Experience: least five years experience in managing the development of large automated systems integration projects that incorporate digital imaging or digital communications technology. A minimum of five additional years experience in an appropriate field of expertise may be substituted for the educational requirement.

Functional Responsibility: Experience in developing standards-compliant software utilizing industry-leading operating systems, languages, protocols and relational databases: DOS/WINDOWS, DEC VAX/VMS, UNIX (e.g., Solaris, IRIX, HP-UX, and AIX), C, TCP/IP, Oracle, and SQL. In-depth knowledge of the design, operational use, and functional characteristics of standards-compliant (e.g., CALS or GOSIP) systems, such as scanning, user interface, optical storage, and index subsystems of digital imaging systems; or the input processing, network transmission, security, network management, and control subsystems of digital communications systems.

Minimum Education: Bachelor's or advanced degree from an accredited institution

Commercial Job Title: <u>System Administrator, Non-UNIX</u> – CI-079

Minimum/General Experience: 2 years administering non-UNIX systems in an institutional environment

Functional Responsibility: Responsible for all Non-UNIX system administration and management including daily system operation, for the computer operating system applicable to the site supported. Must be adept at problem identification and resolution. Must be capable of documenting operating system problems and developing solutions. Uses performance monitoring tools to profile system performance and correct bottlenecks. Uses security monitoring tools to detect weaknesses, viruses, Trojans, and intrusions in order to plug security vulnerabilities.

Minimum Education: A bachelors degree in computer science, information systems or related field or equivalent job experience.

Commercial Job Title: <u>System Administrator, UNIX</u> – CI-080

Minimum/General Experience: minimum of 4 years experience in implementing UNIX solutions plus 2 years administering UNIX systems in an institutional environment.

Functional Responsibility: Responsible for all UNIX system administration and management including daily system operation, for the computer operating system applicable to the site supported. Must be adept at problem identification and resolution. Must be capable of documenting operating system problems and developing solutions. Uses performance monitoring tools to profile system performance and correct bottlenecks. Uses security monitoring tools to detect weaknesses, viruses, Trojans, and intrusions in order to plug security vulnerabilities.

Minimum Education: A bachelors degree in computer science, information systems or related field

Commercial Job Title: <u>Systems Analyst, Senior</u> – CI-082

Minimum/General Experience: 6 years experience in systems analysis. Able to perform moderately complex computer systems analysis work.

Functional Responsibility: Design process improvements for an organization by providing specific technical expertise in the area of statistics as required by the process owner, team leader or team members. Able to design business intelligence solutions to provide the information needed to improve processes. Researches business systems, operations, and data needs to assist in the development of automated systems. Works with minimal supervision. Work involves analyzing various aspects of managerial concern, such as the specific procedures for accomplishing a task; staff requirements and use; equipment requirements, acquisition, and use; organizational structure; and use of space. May train or supervise the work of others.

Minimum Education: Bachelors degree in computer science or related technical field

Commercial Job Title: <u>Systems Architect</u> – CI-083

Minimum/General Experience: 8 years experience in systems design. Experience in a consulting environment with business analysis, data management, system architecture, and distributed technologies. Must understand relational database and web technologies, as well as user interface design and human factors, especially information search strategies. Should be aware of methods for quality assurance and usability testing in information systems. Must have excellent communication skills, with teaching experience preferred.

Functional Responsibility: Designs enterprise architectures by determining how legacy, COTS, and custom modules can be pieced together to provide a solutions framework. Responsible for applying technology and designing systems to achieve client business objectives. Provide overall technical leadership for engagements within major client relationships. Work closely with project and engagement managers to provide coherent direction for clients. Across a broad technical spectrum, interact directly with client staff and management in analyzing situations and resolving issues. Graphic communications will include architecture diagrams, data models, and navigation maps.

Minimum Education: Bachelors degree in computer science or related technical field

Commercial Job Title: <u>Systems Engineer, Senior</u> – CI-085

Minimum/General Experience: 5 years experience in project management/implementation Functional knowledge of standards-based (TCP/IP) applications (e.g. account management, directory and authentication services, SMTP, POP, HTTP, FTP). Hands-on experience in a multi-vendor/platform operating and data base systems environment including installation, configuration, tailoring, modification, and maintenance of hardware, software, database, and systems software tools. Experience with enterprise computing environments, comprised of multiple systems delivering mission-critical applications.

Functional Responsibility: Plan project coordination, management and engineering. Provides comprehensive definition of all aspects of system development from analysis of mission needs to verification of system performance. Performs evaluation of alternatives and assessment of risks and costs. The Senior Systems Engineer is a Project Team Lead, providing technical design and definition of implementation tasks for specific projects of moderately complex to complex technical scope. The Senior Systems Engineer/Administrator is also responsible for the planning and development of distributed and centralized computing systems architectures. Provide functional or technical leadership to staff, including technical review and direction. Assess staff skills for training plans or for augmentation as necessary with contracted support.

Minimum Education: Bachelors degree in engineering

Commercial Job Title: <u>Systems Integration Technical Director</u> – CI-088

Minimum/General Experience: 5 years experience in management or implementation. Senior level systems integration specialist with experience in enterprise software installation and integration. Must be experienced with project time and cost estimation and with managing integration teams. Experience in Java, Relational Data Bases and JDBC, Object Request Brokers (IIOP/CORBA), J2EE, business intelligence, COM+, and techniques of integrating COTS (commercial off-the-shelf) applications with these technologies. Must have leadership skills.

Functional Responsibility: Management and implementation of large programs in one of the following fields: operations, technology innovations, business operations, program management, software engineering, design engineering. Primary responsibility for ensuring that system data integration goals are met by understanding database schemas of products used, and making sure that data from diverse systems are integrated correctly. Key responsibilities include Participate in assignments as an individual and as part of a project team; Determine and resolve data integration requirements and issues; Act as liaison among client technology departments and other members of the implementation team; Complete assigned tasks on time and with a high degree of thoroughness, quality and professionalism; and Provide on-site client support.

Minimum Education: Bachelor's or advanced degree in a recognized engineering, scientific, technical or other appropriate discipline from an accredited institution

Commercial Job Title: <u>Task Team Leader</u> – CI-090

Minimum/General Experience: Minimum of 5 years of professional work experience that provides the required knowledge and skill set. The Task Team Leader will need to have sufficient skills and experience to take sole responsibility for project managing on small scale projects, or sections of larger projects. Needs to be self-managing, take initiative as a matter of course and be pro-active in everything they do. Should be very familiar with all aspects of the software development lifecycle.

Functional Responsibility: Defines and directs technical specification and tasks to be performed by team members, defines target dates of tasks and subtasks. Provides guidance and assistance in coordinating output and ensuring the technical adequacy of the end product. Provide mentoring and leadership to the staff; Complete performance appraisals and provide timely feedback on performance staff; Ensure the training and development needs staff are identified and

appropriate action taken to ensure their current skills are maintained and grown for the benefit of both the organisation and the individual. Ensure that issues and/or concerns of clients are managed and/or escalated to appropriate levels. Resolve technical issues with development associated with technology and/or resources. May act as part-time Software Engineer or as a Test Engineer.

Minimum Education: Bachelors degree in a relevant field of study

Commercial Job Title: Test Engineer – CI-096

Minimum/General Experience: 3+ years of experience (or an equivalent combination of training and professional work experience). Knowledge of the TCP/IP protocol suite, IP networks and Internet protocols is required. Must be familiar with UNIX and Windows (95/NT) OSs. Interpersonal, verbal, and written communication skills are essential.

Functional Responsibility: Reviews, develops, and executes Test Plans and develop Test Reports, which document the results of unit, system, performance, and functionality tests. Performs testing on software, hardware, and system integration and regression. Develops test plans and suites, including test cases and procedures. Executes test plans and logs test results. Identifies and logs any defects, prioritizes them, and recommends fixes. Develops automation tools for testing. Setups and maintains test systems. Interacts with hardware and software engineers/developers.

Minimum Education: This position requires a Bachelors degree in Computer Science/Management Information Systems

Commercial Job Title: Trainer, Senior – CI-098

Minimum/General Experience: Experience includes Bachelors degree and ten years experience (or an equivalent combination of training and professional work experience that provides the required knowledge and skills.) Although education and experience are key factors in determining an individual's qualifications, emphasis must be placed on actual competencies to perform all aspects of the job at each level.

Functional Responsibility: Conducts complex courses from start to completion. Has excellent communications and problem solving skills. Performs system analysis for highly complex classes. Recommends most effective method to utilize equipment, where appropriate. Under general program direction, independently performs training within the field of expertise. May supervise the work of lower level trainers. Conduct needs assessments to determine faculty and staff needs in information technology training, and establish goals, objectives and priorities. Establish an environment conducive to achieving these objectives, and which addresses different learning modalities and styles. Develop training modules in various modalities (live workshops, web-based tutorials) for software applications and computer operating systems. Regularly redesign training programs to meet changing needs and objectives. Deliver training in one-on-one, small or large group settings; present information in a logical, accurate and effective manner. Research, design, write and produce clear user documentation and other training materials (websites, multimedia and online tutorials). Conduct evaluations to assess effectiveness of delivery and content of training sessions and materials. Maintain records & prepare related reports. Organize, prepare and publicize training schedules and promote to users. Evaluate, test and recommend new or upgraded hardware and software packages, based on features that best meet staff needs Identify, evaluate and publicize alternative resources for external training available.

Minimum Education: Bachelors degree

Commercial Job Title: Training Developer – CI-099

Minimum/General Experience: 2 years experience developing training courses and materials. Proficiency in HTML, Macromedia, PhotoShop, Dreamweaver, and/or similar tools. Demonstrated history of learning new technology quickly. Experience developing interactive applications for the Web. Experience working in a fast-paced environment with tight deadlines. Demonstrated ability to work effectively on a project team, with a track record of leadership experience in school, work or community. Ability to communicate clearly with both technical and nontechnical staff.

Functional Responsibility: Provide support in researching and developing educational materials for training classes. Develop training modules in various modalities (live workshops, web-based tutorials) for software applications and computer operating systems. Research, design, write and produce clear user documentation and other training materials (websites, multimedia and online tutorials). Maintain records & prepare related reports. Organize, prepare and publicize training schedules and promote to users. May develop interactive, Web-based training courses and simulations.

Minimum Education: 2 year associate degree